



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/632,573	08/04/2000	Rainer Siebert	15675.P299x	1726

7590 05/20/2005

Blakely Sokoloff Taylor & Zafman LLP
12400 Wilshire Boulevard
7th Floor
Los Angeles, CA 90025-1026

EXAMINER

NOGUEROLA, ALEXANDER STEPHAN

ART UNIT	PAPER NUMBER
----------	--------------

1753

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/632,573

Applicant(s)

SIEBERT ET AL.

Examiner

ALEX NOGUEROLA

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 11-13, 16-30 and 33-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-13, 16-18, 20, 22-28, 33-35 and 40 is/are rejected.
- 7) ☒ Claim(s) 19, 21, 29, 30 and 36-39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/04/00, 07/28/03, 3/22/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed March 14, 2005 ("Amendment") have been fully considered but they are not persuasive.

As a first matter Applicants have filed a Terminal Disclaimer against U.S. Patent No. 5,290,587 not U.S. Patent No. 6,613,212, which was the primary reference upon which the Double Patenting rejections are based.

With respect to the rejections of claims 1-7, 11, and 12 as being anticipated under 35 U.S.C. 102(a) by Shimadzu Applicants assert, "Shimadzu does not indicate that the buffer liquid and the gel are identical. In fact, the composition of the gel contained in the capillary tubes and that of the buffer liquid are completely different. Therefore, the refractive index of the buffer liquid must be different from the refractive index of the gel." See page 10 of the Amendment. Be that as it may, the rejection of claim 1 identifies Applicants' claimed first liquid as corresponding to the liquid in buffer tub 2 or 3 of Shimadzu (outside the capillaries) and the second liquid as corresponding to the liquid inside the capillaries from the other of buffer tubs 2 or 3. As stated in the rejection, since the liquids in buffer tubs 2 and 3 are the same the first and second liquids will have the same refractive indices, which meets the requirement of claim 1 that the first refractive index be equal to or superior to the second refractive index.

Art Unit: 1753

Furthermore, claim 1 does not exclude gel from being in the capillary. Even more so, Applicants' one example has polymer solution in the capillaries and appears to have the same buffer inside the capillaries and outside. See page 13, second and third paragraphs of the specification. This is inconsistent with Applicants' statement that gel should not be in the capillaries.

With respect to the rejections of claims 8, 20, and 22 under 35 U.S.C. 103(a) as being obvious over Shimadzu, Applicants assert, (i) "[I]n Shimadzu, the capillary material has a high refractive index relative to the index of the media outside the capillaries ...", and (ii) that "the refractive index of the media outside of the capillaries is equal to or superior to that of the medium inside the capillaries." See the bottom of page 11 of the Amendment bridging to page 12. The first point is moot because none the relevant claims limit the refractive index of the capillary material, but only the relative refractive indices of the liquid inside the capillaries and outside the capillaries, which may be equal. The second point has been addressed above in regard to Applicants arguments against the anticipatory rejection of claim 1.

With respect to the rejection of claim 13 under 35 U.S.C. 103(a) as being obvious over Shimadzu as modified by Hitachi, Applicants assert that claim 13 requires that the first refractive index be equal to or superior to the second refractive index. See page 13, third full paragraph of the Amendment. The second point has been addressed above in regard to Applicants argument against the anticipatory rejection of claim 1.

Art Unit: 1753

With respect to the rejection of claim 16 under 35 U.S.C. 103(a) as being obvious over Shimadzu as modified by Young I and Young II, Applicants rely on their argument against the anticipatory rejection of claim 1, which has been addressed above.

With respect to the rejections of claim 17 and 18 under 35 U.S.C. 103(a) as being obvious over Shimadzu as modified by Young I, Young II, and Haddad, Applicants rely on their argument against the anticipatory rejection of claim 1, which has been addressed above.

Status of the Rejections pending since the Office action of

November 10, 2004

2. All of the double patenting rejections are maintained. Applicants have filed a terminal disclaimer to overcome the double patenting rejections. However, Applicants have inadvertently filed a terminal disclaimer against U.S. Patent No. 5,290,587 instead of U.S. Patent No. 6,613,212.

3. All of the rejections under 35 U.S.C. 112, second paragraph are withdrawn.

Art Unit: 1753

4. The rejections of claims 1-7, 1, and 12 as being anticipated under 35 U.S.C. 102(a) by Shimadzu are maintained. They are restated below with slight changes resulting from Applicants' Amendment and for Applicants' convenience.

5. The rejections of claims 8, 20, and 22 as being obvious under 35 U.S.C. 103(a) over Shimadzu are maintained. They are restated below with a slight change resulting from Applicants' Amendment and for Applicants' convenience.

6. The rejection of claim 13 under 35 U.S.C. 103(a) as being obvious over Shimadzu as modified by Hitachi is maintained. It is restated below with a slight change resulting from Applicants' Amendment and for Applicants' convenience.

7. The rejection of claim 16 under 35 U.S.C. 103(a) as being obvious over Shimadzu as modified by Young I and Young II is maintained. It is restated below with a slight change resulting from Applicants' Amendment and for Applicants' convenience.

8. The rejections of claims 23-30, 33, 34, 38, and 40 under 35 U.S.C. 103(a) as being obvious over Shimadzu as modified by Young I and Young II are withdrawn.

Art Unit: 1753

9. The rejections of claims 17-18 under 35 U.S.C. 103(a) as being obvious over Shimadzu as modified by Young I, Young II, and Haddad are maintained. They are restated below with a slight change resulting from Applicants' Amendment and for Applicants' convenience.

10. The rejection of claim 37 under 35 U.S.C. 103(a) as being obvious over Shimadzu as modified by Young I, Young II, and Haddad is withdrawn.

11. The rejection of claim 35 under 35 U.S.C. 103(a) as being obvious over Shimadzu as modified by Hitachi, Young I, Young II is withdrawn.

12. The objection to the specification is withdrawn.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1753

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

14. Claims 1-7, 11, and 12 are rejected under 35 U.S.C. 102(a) as being anticipated by the JPO computer translation of Shimadzu (JP 10-019846 A) ("Shimadzu").

Addressing claim 1, Shimadzu discloses a multicapillary electrophoresis system comprising a plurality of juxtaposed capillaries (abstract and Figure 2), at least one source (20) configured for the emission of a light beam to excite molecules lying in its path and inside the capillaries (Figure 2) and means (7) for detecting the fluorescence of the molecules excited by the light beam, wherein the means are arranged so as to detect light which emerges at the exit of the capillaries and which propagates along the direction in which the capillaries extend (Figure 2 and paragraph [0009] of the Detailed Description), the resolution of the detection means is high enough to distinguish light which emerges at the exit of each of the capillaries (paragraph [0014] of the Detailed Description), a first liquid is disposed outside the capillaries (liquid in buffer tub 2 or 3), and a second liquid is disposed inside of the capillaries (buffer solution from buffer tubs 2 or 3; paragraph [0010] of the Detailed Description), the first liquid has first refractive index and the second liquid has a second refractive index, wherein the first refractive index is equal to the second refractive index (since the first and second liquids are the same their refractive indices will be equal).

Addressing claim 2, a resolution as claimed is implied by paragraph [0014] of the Detailed Description, which discloses, for example, suppressing light dispersion in the capillary tube.

Art Unit: 1753

Addressing claim 3, at least one linear array as claimed may be seen in Figure 2.

Addressing claim 4, the additional limitations of this claim may be found in Figure 2.

Addressing claim 5, the additional limitation of this claim note optical system 22 in Figure 2 and see paragraphs [0012]-[0014] of the Detailed Description.

Addressing claim 6, the additional limitations of this claim may be found in Figure 2.

Addressing claim 7, note that since the ends of the capillaries are immersed in the lower buffer tub (3) there will be liquid between the ends of the capillaries. Also, as noted in the rejection of claim 1, the first liquid is the same as the second liquid.

Addressing claim 11, for the additional limitation of this claim note display 8 in Figure 2 and see paragraphs [0012]-[0014] of the Detailed Description.

Addressing claim 12, for the additional limitations of this claim see paragraphs [0012]-[0014] of the Detailed Description.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1753

18. Claims 8, 20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the JPO computer translation of Shimadzu (JP 10-019846 A) ("Shimadzu").

Addressing claim 8, Shimadzu discloses a multicapillary electrophoresis system comprising a plurality of juxtaposed capillaries (abstract and Figure 2), at least one source (20) configured for the emission of a light beam to excite molecules lying in its path and inside the capillaries (Figure 2) and means (7) for detecting the fluorescence of the molecules excited by the light beam, wherein the means are arranged so as to detect light which emerges at the exit of the capillaries and which propagates along the direction in which the capillaries extend (Figure 2 and paragraph [0009] of the Detailed Description), the resolution of the detection means is high enough to distinguish light which emerges at the exit of each of the capillaries (paragraph [0014] of the Detailed Description), a first liquid is disposed outside the capillaries (liquid in buffer tub 2 or 3), and a second liquid is disposed inside of the capillaries (buffer solution from buffer tubs 2 or 3; paragraph [0010] of the Detailed Description), the first liquid has first refractive index and the second liquid has a second refractive index, wherein the first refractive index is equal to the second refractive index (since the first and second liquids are the same their refractive indices will be equal).

Also, at least one linear array as claimed may be seen in Figure 2.

Also, for the focusing means of claim 5, note optical system 22 in Figure 2 and see paragraph [0014] of the Detailed Description

Shimadzu does not mention whether the second liquid is transparent and non-fluorescent; however, since the second liquid is buffer solution it will almost certainly be

Art Unit: 1753

aqueous and thus transparent and non-fluorescent. In any event, it would have been obvious to one with ordinary skill in the art at the time of the invention to have the second liquid transparent and non-fluorescent so as not to interfere with the fluorescent detection of the separated sample analytes.

Addressing claim 20, Shimadzu discloses a multicapillary electrophoresis system comprising a plurality of juxtaposed capillaries (abstract and Figure 2), at least one source (20) configured for the emission of a light beam to excite molecules lying in its path and inside the capillaries (Figure 2) and means (7) for detecting the fluorescence of the molecules excited by the light beam, wherein the means are arranged so as to detect light which emerges at the exit of the capillaries and which propagates along the direction in which the capillaries extend (Figure 2 and paragraph [0009] of the Detailed Description), the resolution of the detection means is high enough to distinguish light which emerges at the exit of each of the capillaries (paragraph [0014] of the Detailed Description), a first liquid is disposed outside the capillaries (liquid in buffer tub 2 or 3), and a second liquid is disposed inside of the capillaries (buffer solution from buffer tubs 2 or 3; paragraph [0010] of the Detailed Description), the first liquid has first refractive index and the second liquid has a second refractive index, wherein the first refractive index is equal to the second refractive index (since the first and second liquids are the same their refractive indices will be equal).

Although not to scale Figure 2 appears to show a distance within the claimed range. In any event, barring a showing to the contrary, such as unexpected results, the specified distance is essentially arbitrary. The excitation beam will be located to impact the capillaries at a location that will allow sufficient separation of the analytes of interest for detection.

Addressing claim 22, Shimadzu discloses a multicapillary electrophoresis system comprising a plurality of juxtaposed capillaries (abstract and Figure 2), at least one source (20) configured for the emission of a light beam to excite molecules lying in its path and inside the capillaries (Figure 2) and means (7) for detecting the fluorescence of the molecules excited by the light beam, wherein the means are arranged so as to detect light which emerges at the exit of the capillaries and which propagates along the direction in which the capillaries extend (Figure 2 and paragraph [0009] of the Detailed Description), the resolution of the detection means is high enough to distinguish light which emerges at the exit of each of the capillaries (paragraph [0014] of the Detailed Description), a first liquid is disposed outside the capillaries (liquid in buffer tub 2 or 3), and a second liquid is disposed inside of the capillaries (buffer solution from buffer tubs 2 or 3; paragraph [0010] of the Detailed Description), the first liquid has first refractive index and the second liquid has a second refractive index, wherein the first refractive index is equal to the second refractive index (since the first and second liquids are the same their refractive indices will be equal).

Art Unit: 1753

Also, at least one linear array as claimed may be seen in Figure 2.

Also, for the focusing means of claim 5, note optical system 22 in Figure 2 and see paragraph [0014] of the Detailed Description

The optical system 22 comprises lenses. See paragraph [0012] of the Detailed Description. Since the optical system 22 is used to focus a laser beam it would have been obvious to one with ordinary skill in the art at the time of the invention to use microlenses.

19. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over the JPO computer translation of Shimadzu (JP 10-019846 A) ("Shimadzu") in view of the Derwent abstract of Hitachi (JP 03092756 A).

Shimadzu discloses a multicapillary electrophoresis system comprising a plurality of juxtaposed capillaries (abstract and Figure 2), at least one source (20) configured for the emission of a light beam to excite molecules lying in its path and inside the capillaries (Figure 2) and means (7) for detecting the fluorescence of the molecules excited by the light beam, wherein the means are arranged so as to detect light which emerges at the exit of the capillaries and which propagates along the direction in which the capillaries extend (Figure 2 and paragraph [0009] of the Detailed Description), the resolution of the detection means is high enough to distinguish light which emerges at the exit of each of the capillaries (paragraph [0014] of the Detailed Description), a first liquid is disposed outside the capillaries (liquid in buffer tub 2 or 3), and a second liquid

Art Unit: 1753

is disposed inside of the capillaries (buffer solution from buffer tubs 2 or 3; paragraph [0010] of the Detailed Description), the first liquid has first refractive index and the second liquid has a second refractive index, wherein the first refractive index is equal to the second refractive index (since the first and second liquids are the same their refractive indices will be equal).

Shimadzu does not require of a fiber bundle interposed between the exits of the capillaries and the charge-coupled device (CCD). In Shimadzu the fluorescence emissions from the analytes in the capillaries are directed to the CCD via an optical system comprising a mirror a series of lenses. See Figure 2. Hitachi discloses a fiber bundle interposed between the exits of the lanes of an electrophoresis cassette and a detection device. See the abstract and Figure 1.

It would have been obvious to one with ordinary skill in the art at the time of the invention to use a fiber bundle as taught by Hitachi instead of an optical system comprising a mirror and a series of lenses in the invention of Shimadzu because it is simpler and less prone to error. An optical system comprising a mirror and a series of lenses is more prone to error than a fiber bundle because of the possibility of misalignment of the optical elements. A fiber bundle is also simpler to install than an optical system comprising a mirror and a series of lenses.

Art Unit: 1753

20. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over the JPO computer translation of Shimadzu (JP 10-019846 A) ("Shimadzu") in view of the Young (US 5,290,587) ("Young I") and Young et al. (US 5,240,585) ("Young II").

Addressing claim 16, Shimadzu discloses a multicapillary electrophoresis system comprising a plurality of juxtaposed capillaries (abstract and Figure 2), at least one source (20) configured for the emission of a light beam to excite molecules lying in its path and inside the capillaries (Figure 2) and means (7) for detecting the fluorescence of the molecules excited by the light beam, wherein the means are arranged so as to detect light which emerges at the exit of the capillaries and which propagates along the direction in which the capillaries extend (Figure 2 and paragraph [0009] of the Detailed Description), the resolution of the detection means is high enough to distinguish light which emerges at the exit of each of the capillaries (paragraph [0014] of the Detailed Description), a first liquid is disposed outside the capillaries (liquid in buffer tub 2 or 3), and a second liquid is disposed inside of the capillaries (buffer solution from buffer tubs 2 or 3; paragraph [0010] of the Detailed Description), the first liquid has first refractive index and the second liquid has a second refractive index, wherein the first refractive index is equal to the second refractive index (since the first and second liquids are the same their refractive indices will be equal).

Shimadzu does not mention having a portion of the outside of the wall of the capillaries between the impact of the excitation beam and the end of the capillaries blackened.

Young I discloses an electrophoresis capillary with a blackened portion of the outside of the wall of the capillary between the impact of the excitation beam and the end of the capillary. See the abstract and Figure 4. Also note the embodiment shown in Figure 3, which allows an excitation light beam to impact a portion of the capillary wall. Young II discloses other embodiments with a detection portion in the capillary wall. See Figures 3 and 5. It would have been obvious to one with ordinary skill in the art at the time of the invention to blacken the walls of the electrophoresis capillaries in Shimadzu as taught by Young I because as taught by Young I this will permit increased control over the electroosmotic flow for improved electrophoresis analysis. See col. 3, ll. 13-16.

21. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the JPO computer translation of Shimadzu (JP 10-019846 A) ("Shimadzu") in view of the Young (US 5,290,587) ("Young I") and Young et al. (US 5,240,585) ("Young II") as applied to claim 16 above, and further in view of Haddad et al. (US 6,054,032) ("Haddad").

Addressing claim 17, Shimadzu as modified by Young I and Young II does not

Art Unit: 1753

mention gluing the capillaries to a support. Haddad discloses a support for a capillary array that holds the capillaries with glue. See the abstract; Figures 1A –3 B; and col. 2, ll. 33-39. It would have been obvious to one with ordinary skill in the art at the time of the invention to use a support as taught by Haddad in the invention of Shimadzu as modified by Young I and Young II because then the capillaries can be readily aligned precisely and reproducibly. See col. 1, ll. 50-62 and col. 3, ll. 55-59.

Addressing claim 18, Haddad discloses that a variety of adhesives or glues may be used and that they maybe transparent or not transparent. See col. 6, ll. 17-26 and col. 5, ll. 59-65. Baring a showing of unexpected results, whether the glue is transparent or not will just depend on whether the glue will be in a detection region.

Allowable Subject Matter

22. Claims 19, 21, 29, 30, and 36-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1753

23. The following is a statement of reasons for the indication of allowable subject matter:

a) the allowability of claims 19, 21, 36, and 39 has been addressed in the Office action of November 10, 2004.

b) Applicants' Amendment of claim 23 has successfully overcome the rejections of claims 23-30, 33, 34, 38, and 40 under 35 U.S.C. 103(a) as being obvious over Shimadzu as modified by Young I and Young II. However, the terminal disclaimer does not overcome the double patenting rejections against several of these claims so only claims 29, 30, and 38, which were not rejected under double patenting rejections and depend from claim 23 are allowable.

c) Applicants' Amendment of claim 23 has successfully overcome the rejection of claims 23-30, 33, 34, 38, and 40 under 35 U.S.C. 103(a) as being obvious over Shimadzu as modified by Young I and Young II. Since claim 37 depends from claim 23 and has not been subject to a double patenting rejection it is also allowable.

Final Rejection

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX NOGUEROLA whose telephone number is (571) 272-1343. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NAM NGUYEN can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1753

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alex Noguerola
Primary Examiner
AU 1753
May 17, 2005